



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Lee A. Nosbisch
Serial No. : 10/699,535
Filed : October 31, 2003
For : STARTER SET FOR BRICK
LINING OF LADLES USED IN
HANDLING MOLTEN METAL
Group : 1742
Examiner : Scott R. Kastler
Attorney Docket : NR8675US

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR 1.132

Lee A. Nosbisch hereby declares that:

1) I am the inventor of a STARTER SET FOR BRICK LINING OF LADLES USED IN HANDLING MOLTEN METAL, as described in the above-identified U.S. patent application.

2) I am a degreed mechanical engineer with North American Refractories Co. My first five (5) years at North American Refractories Co. were spent working as a mechanical engineer. For the last ten (10) years, I have been a sales engineer for North American Refractories Co., and I have observed many brick relines of steel ladles.

3) Conventional starter sets that are used for lining ladles form a "linear ramp." In other words, the starter set defines a flat, upper surface. As courses of bricks are stacked on this flat, linear ramp, a gap is created at the point where the starter set meets a row of horizontal bricks. This gap or crack is exaggerated with each successive layer, i.e., course, of brick.

4) The claims in the above-identified patent application define a starter set of refractory components that when assembled, define an upper surface profile that is upwardly bowed or arched such that refractory bricks set onto the upper surface profile are nearly horizontal at the trailing end of the upper surface profile so as to mate with a row of horizontal bricks at the end of the starter set.

5) The upwardly bowed or arched upper surface profile of the starter set reduces the likelihood of a crack or gap being formed at the end of the starter set and in the courses of brick that are stacked thereon.

6) I have reviewed German Publication No. DE 2558033A that was cited by the U.S. Examiner in the above-identified U.S. patent application. The '033 publication discloses a starter set of bricks having flat, upper surfaces. The '033 publication does not disclose a starter set having an arched or upwardly bowed upper surface profile. It is my opinion that a gap would be formed at the end of the starter set shown in the '033 publication where the starter set meets rows of horizontal brick.

7) I have reviewed U.S. Patent No. 5,824,263 to Erny et al. and U.S. Patent No. 5,882,583 to Erny that were cited by the U.S. Examiner in the above-identified U.S. patent application. Neither reference teaches, suggests or shows a starter set having an upwardly bowed or arched upper surface profile such that refractory bricks that are set

upon the upper surface profile are nearly horizontal where the bricks meet a row of horizontal bricks.

8) I believe that all statements made herein of my knowledge are true, and believe that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements and the like so made may jeopardize the validity of the above-identified patent application or any patent issuing therefrom.

Date: 11/29/05, 2005

DECLARANT:


Lee A. Nosbisch